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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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In the Matter of

Applications of WorldCom, Inc. and
MCI Communications Corporation for
Transfer of Control of
MCI Communications Corporation to
WorldCom, Inc.

CC Docket No. 97-211

To: The Commission

COMMENTS OF GTE

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SUMMARY

The Commission has requested comment on an MCI ex parte "containing information on the proposed divestiture of MCI's Internet backbone business to Cable and Wireless." As summarized below and detailed herein, the proposed divestiture is nothing of the sort, and falls far short of the relief that would be required to ameliorate the profound competitive harms that the merger would otherwise engender. Indeed, the proposed limited sale of a portion of MCI's Internet business raises more questions than it answers and would not constrain the ability of the combined WorldCom/MCI to assume control over the Internet.

The WorldCom/MCI Merger Would Undermine Competition on the Internet

The combination of MCI and WorldCom would create a new entity that would dominate the Internet backbone market. Indeed, WorldCom's Chief Operating Officer, John Sidgmore, has effectively conceded as much, noting that "[h]aving a big network is a huge barrier to entry." As Mr. Sidgmore's statement suggests, the position of an Internet backbone network in the marketplace is determined by far more than the capacity of its fibers or the quantities of its routers and hubs. This is so because members of a network derive value, or positive network externalities, from each additional entity using the network they occupy. In order to maximize the value for their own subscribers, network operators today on the Internet must connect to each others' backbone networks in order to offer customers universal access.

Unlike in the telecommunications services arena, a dominant Internet backbone network is not compelled to interconnect with its competitors, much less to make

interconnection available under just and reasonable rates, terms, and conditions.

Under such circumstances, the presence of a disproportionately large network that can deny access to almost 50 percent or more of the sites that all other networks' customers need to reach is a formidable barrier to entry. While the Applicants have attempted to deny the existence of a separate Internet backbone market, those efforts are in vain. By any reasonable definition, the Internet backbone is a separate product market, and WorldCom and MCI would control the price, terms, and conditions of access to almost 50 percent or more of the sites on the Internet that its competitors must reach.

Competing backbones could not counter anticompetitive conduct by the combined company. Internet interconnection is accomplished through a series of *bilateral* arrangements, and WorldCom/MCI would have the incentive and ability to leverage their combined market power over each such arrangement. They could easily degrade traffic interchange with other networks merely by delaying interconnection capacity upgrades required by increasing traffic loads, with little fear of enforcement actions. Such degradation could be avoided by targeted networks only by accepting cost increases in payments to WorldCom/MCI for additional capacity (if offered). WorldCom/MCI's anticompetitive goal of raising rivals' costs will thus be achieved.

**The Proposed Limited Sale of Parts of MCI's Internet
Business Would Leave MCI and WorldCom Firmly in
Control of the Future of the Internet**

MCI has recently made a proposal under which it claims it will sell off its Internet backbone business to Cable & Wireless. In reality, it is a huge exaggeration to call this sale a "divestiture." It is merely a limited and almost certainly temporary transfer of

certain assets and customers, which would be wholly ineffective in protecting against the anti-competitive behavior by a combined WorldCom/MCI described above for a number of reasons:

- First, a real divestiture of MCI's entire "Internet" network would not be an effective remedy because MCI's practice of tightly integrating its Internet business with other aspects of its operations means that there are few separate facilities, personnel, or customers that could be jettisoned. Those customers whose Internet services were shifted to a new entity would remain customers of MCI for other purposes and would face strong incentives to reassemble the bundled package of services they originally purchased from MCI. This would be facilitated by those customers' continuing relationship with MCI's integrated sales force. It would be impossible to craft safeguards that could effectively prevent efforts by MCI to encourage such backsliding.
- Second, MCI's proposed spin-off falls far short of even such an ineffective complete divestiture. Essentially, MCI has proposed only a sale and lease-back of various Internet-related assets together with the short term parking of certain ISP customers with Cable & Wireless. MCI would retain most of its Internet customer base, and those customers that were transferred would remain even more vulnerable to backsliding.
- Third, Cable & Wireless will not become an effective competitor in the Internet backbone market because of its acute dependence on MCI for transport services, collocation space, engineering services, operations support, and back office functions including billing and customer care services. As a result, WorldCom/MCI would have numerous strangleholds over the operation, performance, and quality of Cable & Wireless's services.

Furthermore, the MCI *Ex Parte* raises numerous questions about the nature of the transaction with Cable & Wireless that undermine any claims that the deal would alleviate concerns raised by the MCI/WorldCom merger. Parsing through the vague and qualified language of the *ex parte*, it seems likely that the non-compete provision will be far less effective than the Applicants would have the Commission believe, that MCI may in fact be retaining significant backbone assets, and that Cable & Wireless's collocation, capacity, and software use rights may be quite limited.

Today, no company controls a disproportionate number of connections to Internet destinations, and every backbone provider has an incentive to ensure high-quality and high-capacity interconnection. If the Commission approves the merger based on an incomplete and ineffective divestiture, this balance would be destroyed. WorldCom/MCI would control a dominant percentage of Internet destinations and have the incentive to deny competitors interconnection. This dominance would be self-reinforcing as users gravitate to what they perceive to be the dominant network. Consumers, in turn, would suffer increased prices, restricted output of services, lower quality, and reduced innovation.

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COMMENTS OF GTE

GTE Service Corporation, its affiliated telecommunications companies,¹ and GTE Internetworking (collectively "GTE"), by their attorneys, respectfully submit their Comments in the above-captioned proceeding. On June 3, 1998, MCI filed an ex parte containing a discussion of its proposed sale of certain Internet-related assets to Cable & Wireless. As detailed in Section I of these Comments, the proposed merger unquestionably would enable the combined WorldCom/MCI to dominate the Internet. Section II explains that the Cable & Wireless transaction is far short of the complete divestiture touted by MCI and would not alleviate the grave competitive concerns of the

¹ GTE Alaska, Incorporated, GTE Arkansas Incorporated, GTE California Incorporated, GTE Florida Incorporated, GTE Hawaiian Telephone Company Incorporated, The Micronesian Telecommunications Corporation, GTE Midwest Incorporated, GTE North Incorporated, GTE Northwest Incorporated, GTE South Incorporated, GTE Southwest Incorporated, Contel of Minnesota, Inc., Contel of the South, Inc., GTE Communications Corporation, and GTE Hawaiian Tel International Incorporated.

merger. In reality, the proposed Cable & Wireless transaction would enable WorldCom/MCI to retain control over critical assets, personnel, and customers, and would leave Cable & Wireless dependent on WorldCom/MCI for transport, collocation, engineering services, operations support, and back office functions.

I. THE MERGER WOULD CREATE CONDITIONS ENABLING WORLDCom/MCI TO DOMINATE THE INTERNET THE WAY THE BELL SYSTEM CAME TO DOMINATE THE TELEPHONE INDUSTRY, BUT UNBRIDLED BY REGULATORY OVERSIGHT.

A. Overview.

In its earlier filings, GTE demonstrated that the combination of MCI and WorldCom will create an entity that will dominate the Internet backbone market.² Indeed, WorldCom's Chief Operating Officer, John Sidgmore, has effectively conceded as much, noting that "[h]aving a big network is a huge barrier to entry."³ As Mr. Sidgmore's statement suggests, the position of an Internet backbone network in the marketplace is determined by far more than the capacity of its fibers or the quantities of its routers and hubs – it is determined by the connection of that network to a multitude of other networks and lower-level ISPs. Simply put, to participate in the Internet backbone market, a network cannot stand alone. It must become part of the "network

² See Comments of GTE Service Corporation, Its Affiliated Telecommunications Companies, and GTE Internetworking, On WorldCom/MCI's Joint Reply To Petitions To Deny and Comments, CC Docket No. 97-21, 65 (Mar. 13, 1998) ("GTE Comments").

³ Rajiv Chandrasekaran, "Making UUNet Into a Very Big Deal; With His Agreement With CompuServe and AOL, CEO John Sidgmore Takes It to Another Level," Wash. Post, Sept. 29, 1997 at F12 ("Chandrasekaran").

of networks" that comprise the Internet, and that means it must interconnect with existing Internet backbone networks.

However, unlike in the telecommunications services arena, a dominant Internet backbone network is not compelled even to interconnect with its competitors, much less to make interconnection available under just and reasonable rates, terms, and conditions.⁴ Under such circumstances, the presence of a single disproportionately large network that can deny access to a huge percentage of the sites all other networks' customers need to reach is a formidable barrier to entry. Such a giant would undeniably enjoy substantial leverage over its existing competitors, leverage that can be exercised to solidify and, ultimately, expand its dominant position.

In the face of these facts, WorldCom and MCI have attempted to downplay their dominance in the Internet backbone market by advancing an unsupported and insupportable definition of the relevant market.⁵ Their suggested definitions would include, alternatively, (1) virtually all telecommunications services,⁶ (2) all Internet-related products and services of whatever type or geographic availability,⁷ or (3) both Internet and non-Internet entertainment services, at least to the extent they might

⁴ See Key Regulatory Differences Between the Telecommunications and Internet Backbone Markets, ("Comparison of Wireline and Internet Regulation") (Appendix 1 hereto).

⁵ Joint Reply of WorldCom, Inc. and MCI Communications Corporation to Petitions To Deny and Comments, CC Docket No. 97-211, 62-67 (Jan. 26, 1998) ("Joint Reply").

⁶ Joint Reply at 69-71.

⁷ Second Joint Reply of WorldCom, Inc. and MCI Communications Corporation, CC Docket No. 97-211, 63-64 (filed Mar. 20, 1998) ("Second Joint Reply").

distract a potential Internet user from his or her computer screen.⁸ None of these market theories withstands analysis. At bottom, a combined WorldCom/MCI will control access to almost 50 percent or more of the sites on the Internet that its competitors must reach in order to provide Internet service, and it will be able to set the terms and conditions for access to these sites.

WorldCom and MCI further contend that, even if they did control 50 percent of the market, providers controlling the other 50 percent could ensure against anticompetitive conduct. This is equally baseless. Almost fifty percent market share held by a single company is not offset by the remaining fifty percent being spread over numerous much smaller companies. Internet interconnection is accomplished through a series of *bilateral* arrangements, and WorldCom/MCI would have the incentive and ability to leverage their combined market power over each such arrangement. With this leverage, WorldCom/MCI will be able to degrade traffic interchange and raise costs for their rivals. This, in turn, will degrade the quality, increase the cost, and reduce the choices of Internet services for the public.

Similarly, contrary to the claims of WorldCom and MCI, the interconnected nature, explosive growth, and ubiquitous access that characterize the Internet will not prevent this result. In fact, as explained above, it is the networked nature of the Internet marketplace that gives rise to the externalities that make this abuse possible.⁹

⁸ Second Joint Reply at 62.

⁹ See Internet Reply Affidavit of Robert G. Harris on behalf of GTE Corporation, 3-4 (June 8, 1998) ("Harris Internet Reply Affidavit") (Appendix 2 hereto).

Members of a network derive value, or positive network externalities, from each additional entity using the network they occupy. In order to increase the value for their own subscribers, network operators must connect to each others' networks. It follows that providers of a networked service must be able to offer customers access to the whole Internet in order to compete.

Today, no one company controls a disproportionate number of connections to Internet destinations, and every backbone provider has an incentive to ensure high-quality and high-capacity interconnection. If the Commission approves the merger on the basis of an imperfect and ineffective divestiture proposal, this balance will be destroyed. WorldCom/MCI would control a dominant percentage of Internet destinations and have the incentive to deny competitors interconnection. The resulting dominance would be self-reinforcing as users gravitate to what they perceive to be the dominant network. Consumers will, in turn, suffer increased prices, restricted output of services, lower quality, and reduced innovation.

B. Contrary to WorldCom/MCI's Assertions, the Internet Can Continue To Grow Unfettered by Regulation Only if the Merger Is Prevented.

A competitive marketplace, astounding advances in technology, and substantial investments in infrastructure by the industry have resulted in an environment where the Internet can thrive – and it has. Every day, more individuals and companies come online, buying access or upgrading access, and integrating the Internet into their daily lives and business plans. GTE hopes that we will not look back at the late 1990's as the high-water mark of the Internet. By maintaining competition, and continuing the

government's wise "hands-off" approach to regulation, the Internet community will be able to harness further technological breakthroughs and near-universal access to ensure that the Internet's promise is not wasted.

Congress and the Commission so far have been doing their part. Section 230(b)(2) of the Telecommunications Act of 1996 states that "[i]t is the policy of the United States . . . to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation."¹⁰ The Commission likewise has followed this sage policy by generally declining to impose onerous regulatory burdens on Internet providers and users.

This promising state of affairs is imperiled by the proposed merger of MCI and WorldCom. The merger, by creating an entity with the ability and incentive to exercise market power, threatens to undermine the competitive market that allows the Internet to thrive. The emergence of such a dominant player would create the need for extensive new regulations – regulations which can be avoided only if the Commission acts now to disallow the merger and maintain competitive balance in the industry.

It is instructive to note that, for some years now, WorldCom has embarked upon a strategy of market conquest by acquisition strikingly similar to that employed by AT&T earlier this century to establish the Bell System.¹¹ The success of AT&T's endeavors ultimately compelled the establishment of ever more intrusive regulatory regimes, gave

¹⁰ 47 U.S.C. § 230(b)(2).

¹¹ See WorldCom/MCI Empire (Appendix 3 hereto); Key WorldCom/MCI Acquisitions (Appendix 4 hereto).

rise to almost continuous litigation over alleged anticompetitive practices, and led to a number of antitrust actions that culminated in a forced divestiture. And all this occurred in a market characterized through much of its history by pervasive common carrier regulation. The Commission should not allow that history to repeat itself here.

Indeed, as an unregulated, currently competitive marketplace, the Internet is even more vulnerable than the telephone system to dominant providers. There are no interconnection, equal access, universal service, non-discrimination, or just and reasonable pricing requirements that apply to the provision of Internet services of any type, including the backbone services that WorldCom/MCI would dominate.¹² Coupled with the geometric growth of Internet traffic, this lack of standards would permit WorldCom/MCI to degrade traffic exchange with their competitors merely by slow-rolling necessary capacity upgrades in the name of "resource allocation" or similar asserted justifications. Consequently, absent provable conduct rising to the level of an antitrust violation or the imposition of just such an intrusive regulatory regime as a substitute for market discipline, WorldCom/MCI would be largely unfettered in its ability to exercise the anticompetitive strategies discussed below.

As the Bell System experience teaches, in these circumstances an ounce of prevention certainly is worth a pound of cure. Fortunately, prophylactic measures are available to the Commission through its authority to refuse approval of the proposed merger. Under the *Bell Atlantic/NYNEX* test, the burden of proof is on WorldCom and MCI to demonstrate that the merger is in the public interest. They must demonstrate

¹² See Comparison of Wireline and Internet Regulation (Appendix 1 hereto).

that "the transaction on balance will enhance and promote, rather than eliminate or retard, competition."¹³ They have not, and cannot, make that showing here.¹⁴

WorldCom's and MCI's attempt to shift this burden of proof to opponents of the merger based, somehow, on the "unfettered by Federal or State regulation" clause in Section 230(b)(2) is not persuasive. In fact, *they have it exactly backwards* – Section 230(b)(2) requires denial of the merger in order to preserve the Internet's free market. The Commission has the opportunity to stop the creation of an Internet monopoly, even while it struggles with the costs of allowing a similar monopoly to dominate the telephone market for close to a century. As Drs. Cremer, Rey, and Tirole warn, "[p]olicy makers cannot take lightly threats to the interconnectedness of the network. . . . [T]here is no halfway: either vigorous competition must be maintained within the current system of interconnected networks or the result will be a monopolist network requiring government regulation."¹⁵ The Commission should follow the will of Congress and avoid the need for establishment of an intrusive and resource-intensive new regulatory regime by denying the WorldCom/MCI merger now.

¹³ *Bell Atlantic/NYNEX Order* at 20063.

¹⁴ This requirement is inconsistent with and overrides WorldCom's and MCI's argument that "for the Internet, the presumption should be that the government should not block or condition a merger unless the record supports a finding that the merger harms the public interest." Second Joint Reply at 61.

¹⁵ Jacques Cremer, Patrick Rey, and Jean Tirole, *The degradation of quality and the domination of the Internet*, April 22, p. 2 ("Cremer, Rey, and Tirole") (Appendix 5 hereto).

C. The Internet Backbone Market Is Separate from Other Product and Service Markets That the Applicants Lump Into a Single, Undifferentiated "Internet Market."

"[T]he burden is on the Applicants to establish the relevant markets" in a merger analysis.¹⁶ WorldCom's and MCI's counsel, however, have not only failed at meeting their burden of proof in defining the relevant Internet markets, but have made a mockery of the Commission's merger analysis process by ignoring the Commission's long-standing product market definition principles.¹⁷ In advancing various inconsistent and self-serving mega-market definition theories, WorldCom and MCI ask the Commission to compromise any "critical analysis" of the merger's anticompetitive effects on the Internet by, instead, examining the merger's impact on: (1) the *all* entertainment offerings market;¹⁸ (2) the *all* high-capacity telecommunications facilities market;¹⁹ or (3) the *all* Internet services market.²⁰ As GTE and numerous other

¹⁶ *Bell Atlantic/NYNEX Order* at 20014. Although WorldCom and MCI argue that the *Bell Atlantic/NYNEX* test applies only to "carriers that provide regulated telecommunications services," Second Joint Reply at 61, that contention is flatly rejected in the recent *Application of Motorola, Inc. Transferor, and American Mobile Satellite Corporation Transferee, for Consent to Transfer Control of Ardis Company*, Memorandum Opinion and Order, 13 FCC Rcd 5182, 5188-91 (1998) ("*Motorola/AMSC Order*").

¹⁷ Notably, WorldCom's and MCI's economic experts neither support their analysis nor challenge GTE's showings regarding the Internet backbone market.

¹⁸ See Second Joint Reply at 62.

¹⁹ See Joint Reply at 69-71.

²⁰ See Second Joint Reply at 63-64. MCI continues to deny the existence of a separate backbone market in its June 3 *ex parte*. MCI *Ex Parte* at 3.

commenters have shown throughout this proceeding, WorldCom's and MCI's proposed market definitions are not valid as a matter of fact or law.

1. Under *Bell Atlantic/NYNEX*, No Demand Substitutes Exist for Internet Backbone Services.

WorldCom's and MCI's mega-market definitions are plainly inconsistent with the Commission's established policy of defining product markets based on the demand substitutability of a given product. Under *Bell Atlantic/NYNEX*, product markets are defined by considering whether if "all carriers raised the price of a particular service or group of services, customers would be able to switch to a substitute service offered at a lower price."²¹ The continuing validity of this test was recently confirmed in the *Motorola/AMSC Order*.²² When the "nontransitory price increase test" is applied to Internet backbone service, the answer is an emphatic "no." There is no substitute for Internet backbone service.

Top-level Internet backbone service is provided via a unique, nationwide system of high-capacity networks that are dedicated to transporting Internet traffic both "on-net" between users and lower-level ISPs connected to a particular network, and "off-net" between those entities and the users and ISPs connected to other Internet backbone providers.²³ In contrast, purely retail ISPs are companies such as America Online,

²¹ *Bell Atlantic/NYNEX Order* at 20015.

²² *Motorola/AMSC Order* at 5192.

²³ Internet Affidavit of Robert G. Harris at 7-9, attached as Appendix 5 to GTE Comments ("Harris Internet Affidavit").

MSN, and Erols that provide online and/or Internet access to end-users and rely on Internet backbone services as an essential input for their offerings.²⁴

In other words, backbone service and lower-level access service are not, as WorldCom and MCI claim, substitutes. Rather, the ubiquitous connectivity provided by top-level backbone service is an "input" that lower-level ISPs use, in part, to provide Internet access service to "end-users." The top-level backbone services and lower-level access service markets are, thus, complements that occupy separate markets. WorldCom's and MCI's observation that top-level backbone-providers offer both backbone and access services does not undermine this clear distinction.

Despite WorldCom's and MCI's further claim that "[t]he Commission has not defined relevant product markets for Internet services,"²⁵ the FCC has relied on these very distinctions to distinguish between backbone services and other Internet-related services on at least two occasions. Most recently, in its Report to Congress on Universal Service, the Commission separately identified *five* types of entities that use the Internet: "(1) end users; (2) access providers; (3) applications providers; (4) content providers; and (5) backbone providers."²⁶ It explained that "*backbone providers*, such as WorldCom, Sprint, AGIS, and PSINet, route traffic between Internet access

²⁴ *Id.* at 9.

²⁵ Second Joint Reply at 62.

²⁶ *Federal-State Joint Board on Universal Service, Report to Congress CC Docket No. 96-45, ¶ 62* (Apr. 10, 1998) ("Report to Congress").

providers, and interconnect with other backbone providers,"²⁷ and, therefore provide a unique service. The agency also noted that backbone service is an "input[]" that ISPs use to provide their Internet access service.²⁸ These findings confirmed conclusions reached in the earlier *Digital Tornado* report, in which it was observed that on one hand, "[b]ackbone providers ... route traffic between ISPs, and interconnect with other backbone providers," while on the other hand, ISPs "connect ... end users to Internet backbone networks."²⁹

2. WorldCom and MCI Claim That There Are Internet Mega-Markets in an Effort To Mask Their Almost 50 Percent Share in the Internet Backbone Market.

Even apart from their inconsistency with the market definition standards established in *Bell Atlantic/NYNEX*, WorldCom's and MCI's proposed mega-market definitions are wholly without merit. For example, in their Second Joint Reply, WorldCom and MCI go so far as to suggest that non-Internet media such as voice telephony, radio, television, and other non-Internet services should be part of an "all entertainment mega-market."³⁰ Yet, even the Applicants state that they "are not aware of any empirical evidence" to support this market theory.³¹ The suggestion that all

²⁷ *Id.* at ¶ 63.

²⁸ *Id.* at ¶ 66.

²⁹ Kevin Werbach, *Digital Tornado: The Internet and Telecommunications Policy*, OPP Working Paper Series 29, Mar. 1997, at 12 (footnote omitted).

³⁰ See Second Joint Reply at 62-63.

³¹ Second Joint Reply at 62-3.

media that have an entertainment component are somehow substitutable for one another simply lacks any reasoned basis and strikingly illustrates the extent to which WorldCom and MCI will go in an attempt to hide the anticompetitive effects that the merger will have on the Internet backbone market.

Similarly, in their Joint Reply to Petitions To Deny and Comments, the Applicants asserted that all high-capacity telecommunications facilities are included within the Internet backbone market.³² The offering of transport over high-capacity telecommunications facilities and the offering of Internet backbone services are, however, not substitutable. Although many entities may construct or lease their own fiber infrastructures, additional equipment, cabling, and operations support systems are required before they can be used to provide backbone services. These special adaptations are costly and specific to the backbone industry. According to Dr. Harris: "[c]onstructing a national high-speed backbone network costs millions of dollars to pay for transport facilities, a 24-hour network operations center and routers. These components need to be integrated together into a single backbone system which requires the procurement of a substantial amount of scarce Internet network engineering talent, establishing interconnection agreements with other backbones and the implementation of billing, customer support, sales and other back-office systems."³³

In addition, as emphasized above, a backbone infrastructure without connections to ISPs and web destinations is of little or no value to a backbone customer. Unless a

³² Joint Reply at 69.

³³ Harris Internet Reply Affidavit at 12-13.

backbone provider can interconnect with all other backbones, or has a dominant percentage of ISP and web connections, it cannot offer competitive backbone services.

As explained by Drs. Cremer, Rey, and Tirole:

In most network industries the benefit that a consumer derives from a network depends substantially on the size of the network, which determines the number of parties with which they can connect . . . As a consequence, a large network is much more attractive than a smaller one . . . the fraction of customers to which an operator controls access becomes a key strategic variable, since the other operators need access to these customers in order to offer a satisfactory level of service to their own customers.³⁴

Thus, even if the operator of a high-speed telecommunications network were to incur the costs of converting its facilities to handle backbone traffic, it would not be able to offer a substitute to other backbone service offerings in the marketplace without universal interconnection. In contrast, WorldCom and MCI will not only be under no obligation to make such interconnection available, they will have strong incentives not to do so, or to do so only in an inadequate or unreasonable manner.³⁵

Indeed, WorldCom's and MCI's only attempt even to address directly the fact that the relevant market is the Internet backbone service market is their assertion that "there is no generally accepted definition of 'Internet backbone'" and that the difference

³⁴ Cremer, Rey, and Tirole at 3.

³⁵ WorldCom's and MCI's further attempt to obscure their dominance in the Internet backbone market by claiming that there is an "all Internet services market" is equally unsupportable. The "Internet mega-market" contention ignores the central issue: the fact that there is no demand substitute for Internet backbone services and, as such, Internet backbone services occupy a separate product market.

between . . . a 'backbone provider' and an ISP is at best one of degree."³⁶ Neither statement is true, as evidenced by the Commission's own recognition of the different roles played by backbone providers and lower-level ISPs.

In the same vein, WorldCom's and MCI's claim that "Internet access services sold to ISPs are no different from Internet access services sold to retail consumers"³⁷ is irrelevant. This argument says nothing about the fact that such offerings are not substitutes for top-level Internet backbone service, which is an "input" used to provide lower-level ISP Internet access service.³⁸

D. WorldCom and MCI Misrepresent the Number of Actual and Potential Most Significant Market Participants in the Internet Backbone Market as Well as Their Market Share by Including All Types of Internet-Related Companies in Their Calculation.

As demonstrated in the previous section, the relevant market under *Bell Atlantic/NYNEX* is the Internet backbone market. Under the merger approval standard established therein, the Applicants have the duty to identify the most significant market

³⁶ Second Joint Reply at 63.

³⁷ *Id.* at 63-64.

³⁸ The Applicants' further assertions regarding customer markets are likewise irrelevant. For example, WorldCom's and MCI's argument that there are not distinct residential, small business, medium-sized business, large business, and government Internet product markets represents an unconvincing attempt to distract the Commission from the real issues at hand. The contention that "there is no basis to treat different types of retail customers as separate markets," Second Joint Reply at 66, addresses the wholly different issue of whether there are separate ISP Internet access service markets based on the type of retail customers, not whether there are demand substitutes for Internet backbone service.

participants providing backbone services and their shares of that market pre- and post-merger. WorldCom and MCI have failed to meet this obligation.

Notwithstanding WorldCom's and MCI's attempts to convince the Commission that every company that provides any type of Internet service is a relevant participant in the Internet backbone market, as of the Fall of 1997 there were only nine companies that actually provide Internet backbone service with more than one percent market share: MCI, Sprint, WorldCom (UUNet, CNS, ANS, GridNet, and Verio), AGIS, BBN, DIGEX, CRL, GOODNET, and iStar.³⁹ Of these market participants, MCI, WorldCom, and Sprint are by far the largest.⁴⁰ If the Commission permits the merger, the two largest backbone providers will combine to create a dominant market participant. As GTE and other commenters have demonstrated in previous filings, the merged company would have almost a 50 percent or greater market share.⁴¹ These estimates are based on published studies of the number of ISP connections to the major

³⁹ Harris Internet Affidavit at 19.

⁴⁰ *Id.*

⁴¹ See GTE Comments at 69; Reply Comments of the Coalition of Utah Independent Internet Service Providers, CC Docket No. 97-211, 1-3 (Jan. 26, 1998) ("CUIISP Reply"); Reply Comments of the Communications Worker of America, CC Docket No. 97-211, 4-12 (Jan. 26, 1998) ("CWA Reply"); Reply Comments of Consumer Project on Technology, CC Docket No. 97-211, 2 (Jan. 26, 1998) ("CPT Reply"); Response of Simply Internet, Inc. and Request for Additional Pleading Cycle, CC Docket 97-211 (Jan. 26, 1998) ("Simply Internet Response"); Petition To Deny the Application of WorldCom or, in the Alternative, To Impose Conditions of Bell Atlantic, CC Docket No. 97-211, 3-13 (Jan. 5, 1998) ("Bell Atlantic Petition"); Petition to Deny of Inner City Press/Community on the Move, CC Docket No. 97-211, 8-11 (Jan. 5, 1998) ("ICP/COTM Petition"); Petition To Deny and Request for Hearing of Simply Internet, Inc., CC Docket No. 97-211 (Jan. 5, 1998) ("Simply Internet Petition"); Comments of Telstra Corporation Limited, CC Docket No. 97-211 (Jan. 5, 1998) ("Telstra Petition").

backbones. Basing market share estimates on connections is not ideal, but the studies of numbers of connections were the only data on the subject then in the public domain. Notably, they are largely confirmed by other market share measures that are now available.

For example, even if the Commission decides to base market share estimates on revenues as urged by WorldCom and MCI, it should not rely on their calculations because they are far off the mark. WorldCom's and MCI's claim that the merged company would have only a 20 percent market share is based upon a comparison of the projected total Internet industry revenues for 1997 to the estimated combined 1997 revenues for the merging companies.⁴² But, their figure for total 1997 Internet industry revenues includes not only revenues for the backbone market, but also for separate markets such as lower-level Internet access and online services.⁴³ As a result, their ratio computation vastly understates the merged entity's market position. If, in contrast, "revenues for ISP services (including on-line services)" and other non-backbone services "were deducted from the numerator and denominator of MCI/WorldCom's analysis," Dr. Harris shows, the merged company's market share would jump to the 40-50 percent range, consistent with GTE's earlier estimates.⁴⁴

⁴² Second Joint Reply at 72.

⁴³ Harris Internet Affidavit at 3-4.

⁴⁴ Harris Internet Affidavit at 16. GTE is prepared to disclose additional corroborative data upon adoption of a suitable protective order by the Commission.

E. Yet Again, WorldCom and MCI Have Failed To Address the Substantial Barriers to Entry in the Internet Backbone Market.

The merged company's dominance of the Internet backbone market would not likely be challenged by new or potential competitors, because the barriers to entry in that market are substantial. These barriers preclude would-be competitors from constraining the exercise of market power by the merged entity.

In order to downplay entry barriers, WorldCom and MCI suggest that it is "not disputed by the petitioners"⁴⁵ that the "cost of constructing a backbone network does not create a significant barrier to entry."⁴⁶ Although that cost is, in fact, substantial, GTE has explained that the very existence of WorldCom/MCI would create a huge barrier to entry.⁴⁷ As John Sidgmore has effectively acknowledged, even if the cost of constructing the infrastructure needed to offer backbone services were manageable for would-be entrants, the ability of a dominant provider like WorldCom/MCI to deny or condition interconnection to the disadvantage of its competitors would have a tremendous impact on deterring entry.⁴⁸

Mr. Sidgmore is right on target. As Appendix 6 demonstrates, the merged entity's "big network" would control a vast base of Internet sites. The merged entity's control of a high percentage of all Internet sites, combined with the fact that the

⁴⁵ Second Joint Reply at 69.

⁴⁶ *Id.* at 70.

⁴⁷ See Harris Internet Reply Affidavit at 8-10.

⁴⁸ See Chandrasekaran at F12.